THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 241. } PHILADELPHIA, JUNE 1, 1861. { NEW SERIES, VOL. VI. NO. 9.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Anatomy in its Relations to Medicine and Surgery.

By D. HAYES AGNEW, M.D.,
Lecturer on Anatomy, Surgeon to Philadelphia Hospital, etc.

No. 43.

Cervical Region—(*Continued.*)—In proceeding next to a description of the other elements of the neck it will conduce, in no small degree, to the accuracy of our subject to apportion it into territorial districts. There is nothing new in this, having been adopted by almost every writer on regional anatomy. The *median* and *lateral* regions form the first general division, each of which, for reasons not arbitrary, but anatomical, must be divided into a *sub-hyoid* and *supra-hyoid* region, according as they are above or below that bone. This separation is founded in the existence of a leaf of the deep fascia, which is uninterruptedly connected from the angle of the jaw and styloid process (*stylo-maxillary ligament*) along the stylo-hyoid ligament, great corner and body of the hyoid bone to the mesial line. Any of the normal constituents, which pass from one to the other, invest themselves with prolongations derived from the partition membrane, and which are so closely attached to their surface as to admit of no communication whatever. Let me here repeat, again, that these and similar membranous extensions in the neck, make circumscription the rule in most pathological products seated deeper than the superficial fascia.

Viewing the neck laterally, the idea of a quadrilateral figure irresistibly comes up in the mind; the four sides of which are, the clavicle below, the base of the jaw, and the mastoid portion of the temporal bone above, the middle of the neck on the inner and the margin of the trapezius muscle on the outer side.

This square is divided into two large triangular spaces by the diagonal course of the sterno-cleido mastoid muscle. These spaces are called the *anterior* and *posterior cervical triangles.*

The sterno-cleido mastoid arises from the sternum and clavicle and is inserted tendinously into the mastoid portion of the temporal bone and the outer extremity of the superior semicircular line of the occipital bone. The sternal and clavicular attachment presents a cellular interval, and not unfrequently the clavicular portion shows a tendency to separate into two heads. This part of the muscle varies greatly as to the extent of its clavicular connections, sometimes running back full one-half the length of the bone.

Omo-Hyoid Muscle.—This muscle arises from the body of the hyoid bone, alongside the sterno-hyoid, and descends the neck closely in contact with the outer edge of the last-named muscle. When opposite the cricoid cartilage it begins to incline toward the sterno-cleido mastoid, underneath which and over the sheath of the carotid vessels it passes, there becoming tendinous, and appears, emerging from beneath its posterior border, again fleshy and prolonged beneath the trapezius to the upper border of the scapula, into which and the coracoid ligament it is inserted. This muscle is inclosed in a distinct leaf of the cervical fascia. Its transverse course from the hyoid bone to the shoulder divides each of the two primary cervical triangles formed by the sterno-cleido mastoid muscle into two others, which are called *anterior superior* and *anterior inferior*, according as they are in front of the sterno-cleido mastoid, and above or below the anterior belly of the omo-hyoid, and *posterior superior* and *posterior inferior*, according as they are behind the sterno-cleido mastoid muscle and above or below the posterior belly of the omo-hyoid.

Out of the anterior superior cervical triangle are constructed two additional spaces or re-

gions, the *submaxillary* and *parotid;* the first in front, and the second behind the stylo-maxillary ligament, and both above the digastric muscle. The digastric muscle consists of two fleshy portions (G. G. Fig. 38) connected by an intermediate tendon. It arises from the digastric groove upon the temporal bone, covered in by the mass of muscular tissue attached to the mastoid process of that bone, passing through the stylo-maxillary ligament, it next pierces the

Fig. 38.

stylo-hyoid muscle, becoming looped down to the hyoid bone by a ring of deep fascia; from thence it is continued on fleshy, to be inserted upon the inferior maxillary bone near its symphysis.

Fig. 38 will serve to illustrate the foregoing observations: — A, trapezius; F, base of the jaw; E, clavicle; D, median line, forming the four sides of the cervical square; B, the sterno-cleido mastoid; F, B, D, the anterior cervical triangle; A, B, E, the posterior cervical triangle; C, C, the omo-hyoid muscle, creating four triangular spaces out of the last two; A, B, C, the posterior superior, and B, C, E, the posterior inferior triangles; B, F, C, the anterior superior, and B, C, D, the anterior inferior triangles. Crossing from the ear toward the chin is seen the digastric muscle, G, G; piercing by its tendon the stylo-hyoid muscle H, and taking from the anterior superior triangle a considerable space, which in turn is divided into two by the stylo-maxillary ligament L; the one in front the sub-maxillary, the one behind the parotid region.

The last cervical region requires a considerable displacement of structure to expose it to view. It is the *sterno-clavicular*, being placed behind that articulation.

These regions may be tabulated as follows:

MEDIAN CERVICAL REGION, { Supra hyoid region. and Sub-hyoid region.

LATERAL CERVICAL REGION.

Supra Hyoid { Sub-maxillary and Parotid.

Sub-Hyoid { Anterior triangles and Posterior triangles { Anterior superior triangle. Anterior inferior triangle. Posterior superior triangle. Posterior inferior triangle.

STERNO-CLAVICULAR REGION.

Let us proceed to study the *Median* cervical region, and especially that part below the hyoid bone, between it and the top of the sternum. It is traversed by respiratory, vocal, and alimentary organs. On its surface are to be distinguished successively from above, downward, as illustrated in fig. 35 or 36, the hyoid bone, the

thyroid cartilage, (pomum Adami or Adam's apple,) the cricoid cartilage, and the supra-sternal fossa; the last abruptly defined laterally by the tendinous origins of the sternal portions of the sterno-cleido mastoid muscles. The operations most commonly practiced in this region are tracheotomy, laryngotomy, or a combination of the two laryngo-tracheotomy. Its importance as a surgical region cannot be over-estimated.

As the law of symmetry pervades in the main the cervical, as well as the other portions of the body, we are naturally led to regard the mesial line as important ground, and very properly so.

The muscles which lie nearest to it do not pass from one side to the other. They are connected by a fascial membrane: neither do any great blood-vessels entrench upon it, though by very small branches they may communicate across this line. The most superficial inspection of this part will convince the observer that the respiratory tube recedes from the surface in proportion as the root of the neck is approached. In the supra-sternal fossa the trachea in an adult subject, without any excess of adipose tissue, lies beneath the surface, one inch.

Contributions to the Pathology of the Spinal Cord and its Investing Membranes.

Read before the Brooklyn Medico-Chirurgical Society.

BY LOUIS BAUER, M.D.,

Of Brooklyn.

[Concluded from page 165.]

Case 12. Complete paraplegia of eight years standing; paralysis of detrusor urinæ; partial loss of virile functions; no permanent relief.

This case refers to a young Southern gentleman, aged twenty-three years, of highly-cultivated mind. The members of his family were all full, robust, and exceedingly handsome, and he was no exception. Above the medium size, he was well proportioned, and though for eight years an invalid, more or less forced to confinement, having been subjected to various modes of treatment, yet his general health seemed to be unbroken, his exterior unchanged, and the chest and arms indicated still the frame of a powerful youth. As far as I could learn, no disease of a similar character had made its appearance in his family, nor was there any special morbid disposition extant.

The first intimation the patient had of his approaching difficulty, was, at the age of fifteen, when a pupil at a boarding-school. Having been used to vigorous exercises in riding on horseback, hunting, and fishing, and exposing himself to all sorts of atmospheric influences, hardships, and privations attending such sports, he had borne them with perfect ease and comparative indifference, and never before experienced the slightest impression upon his health. One afternoon he indulged with his schoolmates in a play in which he had to run much, and overheated himself, the temperature being high. The lads continued their game in racing home. Always one of the first, if not the very first, this time he could not keep pace with his mates, and with all his exertions he was left behind. His own words to this effect are, "I struck out boldly, but my feet seemed to return to the same spot from which I raised them." When he at last arrived home he felt exhausted, and was literally bathed in perspiration. His condition was so unexpected and exceptional to him that he immediately informed the principal and his father, who is himself a physician. The following days he kept quiet, and did not so much notice the change in his locomotive powers, but when he returned to his father's house, and attempted to walk, his legs refused to do their duty. His father immediately prescribed for him, and among other things used electricity for some weeks, by which treatment he recovered in a lapse of two months the use of the extremities, although not in the same perfection. It was deemed desirable to send him North, and it was hoped that traveling would completely restore him. He went to the White Mountains, and gradually acquired so much strength as to indulge again in pedestrian tours, from which he derived no inconvenience, save an unusual burning sensation in the soles of his feet. About returning to New York, and burdened with his carpet-bag, he arrived at the station just when the train was leaving, and had to run several yards in order to overtake it, which he succeeded in doing. In the cars he placed himself by a window in a heated condition, and thinks he was suddenly cooled by the draught. On the route he already felt disagreeable sensations, and, on his arrival in New York, was almost helpless. An eminent surgeon was immediately sent for, who ordered a seton to the back and gave him strychnia. Under this treatment, in three weeks, he became perfectly paralyzed,

and has changed but little during the succeeding years.

After having exhausted the advice of the most prominent physicians of the country, he went to Paris, and consulted Professors Magendie and Cruveilhier. After having consulted these gentlemen who pronounced his disease hydrorachia, and expressed but little hope for his relief, he went to London, and subsequently to Brighton, where he remained for two years. Having derived no benefit whatsoever, from the use of anti-rheumatics, absorbents, tonics, and alterants, including strychnia and arsenic, he placed himself at last under the charge of a quack, whose treatment consisted in cold baths, cold injections, aromatic frictions of the affected extremities, from which he derived some benefit in the regulation of his alvine functions, and promoting the nutrition of his paralyzed members, leaving his paralysis essentially the same.

For a few years, the patient resigned himself to his apparent fate, and dismissing all further treatment. When he was eight years thus affected, he placed himself under my charge. Being examined on that occasion, his disease presented the following features: The lower half of his body completely paralyzed. Sensation extinct, save in a few isolated spots. His volition had completely vanished, from which there was not one single muscle excepted; whereas the muscles were at times thrown into a perfect rigor by reflex actions. This action could at any time be excited in the several muscular groups, although their intensity might vary. Sometimes tremor or twitchings would ensue; at other times, tonic spasms. In order to bend his extremities when in a state of great rigor, he resorted to a blow into the popliteal space, in which case the flexors and extensors of the foot would alternately contract and relax, so as to shake the knee with rapidity. Sometimes this rigor lasted for days, and was so intense as to allow the patient to stand upon his extended legs when placed in a corner. At such periods he always felt worse, and when the muscles were spontaneously relaxed he felt very much better. These reflex actions made their appearance at times without any sensible cause; at other times they followed upon exertions, and their duration varied from minutes to hours. Nothing would produce them more certainly than irritation of the large toes and the glans penis, and nothing controlled them better than the forcible flexion of the toes. The same observation I have made in similar cases. The limbs were greatly attenuated and rather cool, although the venous circulation seemed not to be impeded, and the color therefore normal. When the reflex actions were most violent, the patient would complain of the sensation of electric discharges along the nerves of the lower extremities, but usually the feeling of numbness prevailed. His alvine functions were rather sluggish, but susceptible to mild aperients. The sphincters vesicæ and ani seemed to act well, at least no incontinence was observed; whereas the body of the bladder was so completely paralyzed as to require mechanical compression above the symphysis pubis in order to empty it. He experienced, at long intervals, seminal emissions with little sensation, and he was not entirely disqualified for the performance of coitus. On inspecting the spine, nothing was observed as to change of form; it had retained its perpendicular position, with a moderate diminution of the natural curves, especially in the lumbar portion. Percussion rendered the ordinary resonant sound of the intestines, and conjointly with hot sponge and interrupted electricity evinced the second lumbar vertebra to be tender. A similar tenderness of an ephemeral character was noticed at other places, and especially on the third and fourth thoracic vertebræ. The position of the body had no influence upon the extent and intensity of the symptoms. The rest of the vital functions were in good order, and require no special notice. The urine contained a superabundance of phosphates.

The diagnosis was evidently obscure. I could not, however, reconcile my views with hydrorachia. In the first place, I should have expected a dullness of the spine along the seat of the water, although this is a mere speculation. Secondly, I should premise in hydrorachia the symptoms would be modified by change of position; and, in fine, I was inclined to attribute to over-exertion much more the cause of the disease than to rheumatism, of which the patient had had no previous cognizance. It could not be doubted that the disease had rather a peripheral seat, for the essential structure of the cord was externally made, whilst the central or ganglionic portion seemed to have retained, if not exceeded, its energy. Moderate compression was therefore compatible with the symptoms. At any rate, it could not be decided with positive certainty, whether the structural integrity of the spinal cord had suffered to such an extent as to exclude all

hope of improvement, or whether the disease had essentially located in the membranes, and communicated itself in the course of time to the cord. In order to derive as much diagnostic elucidation of the case as possible, I appealed to a higher and greatly appreciated source of experience by inviting Prof. Alonzo Clark to see the patient with me. His most rigorous examination of both the past and present condition of the patient did not throw more light into this obscurity. In one point we agreed completely, that is in rather a hopeless prognosis.

The patient, however, determined to take his chances, entered upon the succeeding treatment with heroism. Presuming that inflammation, more or less still persistent, and its products upon the spinal cord, were at the bottom of the difficulty, I resolved upon an anti-phlogistic, absorbent treatment, and for this purpose I preferred gradual mercurialization by the methodic inunction of blue ointment, supported with restricted diet, warm bath, occasional local depletion by artificial leeches and setons on either side of the spine. Four weeks almost elapsed before the patient was brought thoroughly under the influence of mercury, when I suspended for about ten days all treatment in order to resume it again, when I allowed free salivation to take place. This treatment reduced the patient in weight twenty-six and a half pounds, rendered him, figuratively speaking, almost transparent. At the tenth week, salivation gradually subsiding, I commenced with Blancard's pill and generous diet. It was at this time that he showed the first signs of improvement. The reflex actions were subdued, the sensation increased, the adductors of the thigh, the flexors of the toes and feet, could be moderately used. The discharge of the urinary bladder could be more easily effected, preceded by more healthful sensation of its contents. Erections of the penis were noticed, and the hyperneuse sensitiveness of the spine had almost vanished. These improvements were, however, of but short duration, extending not more than a fortnight, when the old complex symptoms set in again. I made no further attempt at radical cure, but concentrated my attention on building up the general health of the patient, in which I succeeded.

After five months of treatment, the patient left for his Southern home without hope, and resolved to acquiesce in his misfortune. His youth, however, did not allow him to rest therewith. A year had scarcely elapsed when he induced me to write in his behalf to Professor Romberg, of Berlin, and to submit his case to that distinguished gentleman's opinion. His decision was by no means calculated to discourage the patient, and he journeyed to Berlin, and as far as I know is under Prof. Romberg's care.

The correspondence which I had with Prof. Romberg on the case of Mr. P. has been the source of great information to me, of which I may thus much allude to, that Prof. R. disapproves in unmeasured terms the premature use of all stimulating remedies, especially of strychnia and electricity in diseases of the spinal cord and its membranes, in his experience, rendering almost every incipient case incurable.

My clinical records contain a much larger number of cases appertaining to the spinal cord and its membranes; some of which at least are not inferior in physiological and pathological interest to those related. But my paper has already exceeded the time prescribed by the rules of the Society, and I do not wish to impose upon your indulgence longer than is absolutely necessary to give my communication interest and character.

I will, therefore, conclude with a few marginal remarks on the management of paraplegic patients with reference to their comfort and ease. These unfortunate beings are mostly doomed to domestic confinement for continuous years; they can but little change their position; they are liable to bed-sores and cutaneous sloughing; their passages require domestic facilities outside of the ordinary provisions, and so forth. It is of vital importance to furnish such patients with a bed so pliable and elastic as to sustain the weight of the body on every point, and to remove the pressure from those particular regions that are especially susceptible to decubitus, as, for instance, the heels, the sacrum, and the spine. Nothing meets this indication better than the water-bed, which is, besides, a most delicious luxury. Next in value is the air-matress. Both being made of India-rubber they prevent the free evaporation of sweat, and would thereby favor excoriation of the integuments, unless well covered with comforters and blankets. The apprehension of a bad odor from such beds is unfounded, because the same material that prevents the escape of water and air will effectually protect against the *emanation* of odor. Moreover it is only in new water and air-beds in which it generates.

On the second change of their contents the odor disappears entirely, and the same water or air may be used afterward for twelve or more months without the slightest change. Under the use of water or air-matresses bed-sores will readily heal.

The following salve I have found very serviceable in relieving bed-sores:

℞.—Glycerinæ optimæ, - ℥v.
Coque et adde.
Amyli - - - ℥j.
Liq. plumbi subacetatis, ℥ss.
Extr. belladonnæ, - gr. iij.

Mix well and make into an ointment.

There are some ingenious contrivances which may be usefully employed to render the patient somewhat independent of his nurses, and to give him locomotion:

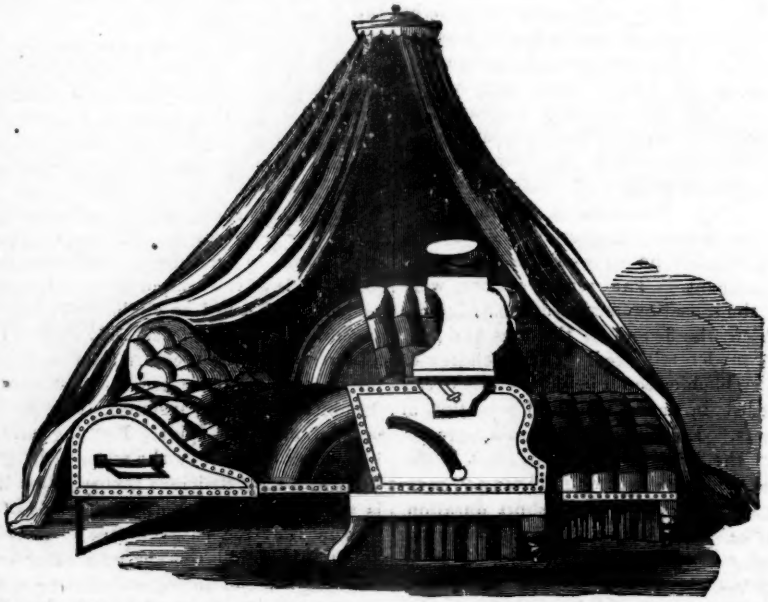
1st. King's chairs, which provides an easy and well-supported seat, with reclination of the back.

2d. C. L. Taillant's chair for invalids, a complicated but exceedingly useful construction for hemiplegic patients, which may

Fig. 1.

be used as a simple chair, with or without reclination or as a bed; it has facilities for reading, for meals, for self-raising, etc. etc., and is in fact the most complete apparatus of this kind I know of. The patentee lives at No.

Fig. 2.



403 Fourth avenue, New York, and, as the invention of Mr. Taillant's chairs for invalids is comparatively recent, I have procured some diagrams of its construction, which I submit to the society.

3d. Rolling chairs by which the patients may on an even ground propel himself, or be pushed by a nurse. I have seen several of them which compete in ingenuity and perfection, but I am unable to give the names of the inventors or diagrams. Some are exhibited on Broadway, where they may be inspected.

Trismus.

BY JAS. E. GARRETSON, M.D.,
Of Philadelphia.

In my paper on Dental Anomalies, I alluded to the process of maxillary enlargement, and exhibited how the process was, in part, counterbalanced by an improper extraction of the deciduous teeth. I further showed how certain derangements of the dental organs was a common, if not a necessary, sequence to such abridgment of the arch; and, among other ill effects, referred to the impossibility of a natural and healthy evolution of the wisdom teeth, and to the conditions favoring periodontal inflammation.

In this paper I am to consider Lockjaw entirely, as it has a local signification, and even more exclusively than this, as it has alone a surgico-dental signification.

Such surgico-dental signification, however, will, I apprehend, outside of tetanic conditions, be found to have the widest relationship to the lesion, and, indeed, if my experience has not been uncommonly one-sided, it will be found to have the very closest relationship, for, I incline to think, that in every twenty cases of local trismus, eighteen has, as the primary lesion, periodontitis in some of its varied forms.

We have studied the retraction of the dental arch. We will now look at such lesions as this retraction has engendered—lesions pertaining to the subject we have now under consideration.

The troubles of an individual afflicted with a contracted dental arch are most apt to begin at about the fifteenth or sixteenth year of age. If you look into such a mouth, you will find the teeth crowded together in most uncomfortable-looking positions. The last molar of the lower jaw you will find, most likely, jammed into the ramus; while the same tooth of the superior jaw will be found occupying the very extreme of the tuberosity of the bone.

At this period—unless, fortunately, the teeth are possessed of uncommon density—you will find them breaking down from approximal caries; while, as the result of such caries, combined with the crowded condition of the fangs, the alveolo-dental periosteum enters into the sub-inflammatory state, and becomes as ready to put on acute disease as is the tinder to take the spark.

If, then, interference with the elongatory process has been such as to yield these troubles, when only twenty-eight teeth have erupted, is it not plain to infer that the development of the four dentes sapientæ must proportionably add to these difficulties? Of course it is very plain, and only by appreciating the character of such trouble can we fit ourselves to abort its lesions.

These lesions are periostitis, alveolar abscess, stomatitis, ostitis, necrosis, trismus, etc., etc.

In the paper on Anomalies, I remarked that all dental troubles arising from retraction and diminution of the maxillary arch could be provided against by a timely extraction of certain of the permanent teeth; and from this we might infer that trouble arising from an advancing wisdom tooth might also be provided for on this same principle, namely, by extracting the last molar, thus providing the required alveolus.

These pathological conditions, and the remedial and prophylactic indications so plainly written over them, it would seem impossible, because of their very simplicity, to over-look; that they are overlooked, however, is too evident, from their many secondary lesions which the surgeon finds himself constantly called upon to treat.

I advanced the view that the majority of the cases of trismus would be found having, as the primary lesion, some periodontal trouble. Of course I would be understood as not including trismus neonatorum, or any trismus traumaticus, the lesion of which was self-evident. A child might get a severe burn on the cheek, and trismus might be the result of the inodular tissue, which would close up the break in the continuity.

Anchylosis might exist, the sequence to articular disease. Traumatic tetanus, affecting the muscles of the jaw, would have a primary lesion combined with peculiar nervous disturbances, and which would give the diagnosis. But it is to the numberless cases of so-called idiopathic trismus I allude, and to the cases of trismus which have evidently alone a local signification; that signification not being always very evident, or otherwise associated with so many complications as not to seem distinguishable.

We read in the books of case after case of local trismus,—of the lesion being referred to this cause and the other cause,—the treatments being as various as the diagnoses. Many of the inferences thus presented are, without doubt, just and reliable; but I would give it as

my experience, that where, personally, I have had the opportunity of seeing such cases as would seem to be their parallel, I have mostly been able to point out to the practitioner exhibiting the case, as the primary lesion, some dental disturbance, simple or obscure.

In the epitome of Braithwaite, page 191, vol. 2, is a case, the diagnosis and treatment of which will serve as an example. Dr. Sellers, the practitioner, who reports the case, ascribes the trismus to a complication of inflammatory and nervous derangements. Now, while I might have found myself wrong, yet from his history of the case, and from the age of his patient, I should have expected, had I seen the case with him, to have been able to have pointed out that the ulcerated sore throat, to which he alludes, had its primary in a periosteal trouble of the alveolo-dental membrane;—but the reader shall draw his own inference. I will compare with this case one from my own practice some three months back.

DR. SELLER'S CASE.

Acupuncture in Protracted Lock-Jaw.—The patient, twenty-five years of age, unmarried, had for years been subject to attacks of suppurating sore throat, in which the jaws often became nearly immovable for two or three days before the discharge of matter. In 1826, she had a severe attack, from which resulted complete lock-jaw, accompanied with hysterical symptoms, which attack yielded after six weeks of treatment so far that she could put a teaspoon in her mouth. After nearly a year, the jaw again became completely fixed, without accompanying sore throat, and the same treatment, with galvanism, was tried without effect. Although unequivocally connected with hysteria, there was reason to think, from the inflammatory action with which the disease set in, that the affection was not purely spasmodic, but was kept up by the rigidity of the muscles closing the jaw produced by inflammation; in consequence of which the antagonistic muscles had become inadequate to the effort of opening the mouth under the mere influence of volition.

It was this view of the case which made Dr. Seller think it more reasonable in making trial of the needles, to insert them into the muscles opening the jaw, in the expectation of exciting them to such a contraction as might overcome the rigidity of their antagonists.

On each of the two following days, two needles were inserted, one on each side of the mesial line between the chin and the hyoid bone, the effect being short, convulsive efforts. The teeth began to grate on each other, and the jaw was drawn from side to side, not by single alternate contractions, but by severe, convulsive movements on one side, followed by a nearly equal number toward the other side, interrupted occasionally by a momentary opening of the mouth to the extent of about two fingers' breadth.

The convulsions continued after the needles were withdrawn; ceased and became renewed again after a few minutes, and returned spontaneously in the evening on both occasions. Some increase of voluntary power over the jaw followed both applications of the remedy. After each trial of the acupuncture, some improvement was observable; but, as the spontaneous convulsion was almost always followed by a slight loss of motion, the progress made was slow.

The needles were usually inserted to the depth of half an inch, and sometimes to the depth of an inch.

The acupuncture, together with leeches, was used for ten days, by which time the patient could open the mouth two fingers' breadth and chew soft substances. She then went into the country for five weeks, by which she derived great benefit; but, being exposed to cold and wet, on her return, had another severe attack, the consequence of which was the loss of much of the voluntary power over the muscles of the jaw. The needles were again resorted to with the same effects as before; but the pain produced by the convulsions was greater, and lasted longer, while the spontaneous convulsion recurred several times in the evenings after each of the first trials. As leeching did not succeed in mitigating the convulsion, the temporal artery was opened with the desired result, and with the effect at the same time of restoring, to a considerable extent, the sight of the right eye, which she almost lost with the first attack of lock-jaw. A second detraction of blood from the same vessel diminished the force of the convulsion so much as to permit the acupuncture to be used twice a day. Nine days after the renewal of the operation, the jaw had recovered its natural extent of motion.

The aphonia, which had come on at the same time as the affection of the eye, was completely cured by a smart shock of electricity.

The case I referred to, as from my own experience, occurred in the practice of a friend—

my relation with it being in a consultation. Its history is as follows:

For the period of a year and more, the patient, Mary C., twenty-four years of age, had been troubled with attacks of sore mouth and throat whenever she unduly exposed herself; these attacks had always associated with them partial loss of voice and general excitation of her whole nervous system, while her jaws were invariably stiffened to a greater or less extent, according to the severity of the attack.

On each of these occasions, she had depended for relief upon domestic treatment or homœopathy. At the period, however, of her coming under the care of my friend, Dr. W., she was suffering from such severe trouble as to frighten her homœopathic attendant into dismissing the case. Her jaw had remained so firmly locked for a period of six weeks that it was with difficulty a knife-blade could be introduced between the teeth. This particular spell had come on as usual; but the patient said there was something about it which made her think that her teeth were implicated; she could not say what tooth or teeth, but thought it was one or more in the lower jaw.

Now, whatever was to be discovered as the primary lesion in the case; its surgical features, as it presented itself to our attention, was an extra capsular mass of coagulated lymph about the tempero-maxillary articulation, which overbalanced the influence of the genio-hyoid muscles holding, of course, the parts in a state of false anchylosis.

I asked the patient "if, when these attacks came on, her face had not always swelled more or less?" She said that "it had." I asked her "if the cheek had not always a stiff, hard feeling in it, which wore away gradually after such attacks?" "It was so," she told me.

Dr. W., agreeing with me that the speediest way of overcoming the trismus was by mechanically breaking up the adhesions, I procured a pine stick about a foot in length, tapering, wedge-shape, from an inch and a half base. The thinnest portion of this wedge was, after much trouble, passed between and across the dental arches, and, after being forced a little further on, the stick was turned on its axis, the adhesions yielding before the strain. Thus the mouth was opened at least an inch, and we were enabled to explore this cavity for the lesion upon which the trouble depended.

So far this case will be seen closely to similate the case of Dr. Sellers—sore throat, aphonia-hysteria.

Now, here we found all the trouble emanating from a wisdom tooth projecting, as it were, from the very angle of the jaw, and half covered in by an opercula of gum drooping over on it from the ramus. The tooth, of course, we at once removed. We dismissed the patient for the day, after directing a sorbefacient external application.

The next afternoon, at four o'clock—no inflammation having supervened—we completed, by our mechanical appliance, the unlocking of the jaw. In a week the patient was dismissed well. She has since had no return of her spells, and I am perfectly sure will not have.

I think a parallelism between these two cases will be recognized, but should the reader disagree with me, the study of them will not, I trust, be without its profit.

One of the most severe cases of inflammation of the mouth, throat, and face, combined with a bad trismus, I have ever seen, was in the person of a medical student in the office of a Dr. C., of this city—the primary lesion being such a half-erupted wisdom tooth as I have alluded to as being found in the lesion in the preceding case. This patient, when I first saw him, had been suffering for two or three weeks. The opercula of gum had been split up on two different occasions. Antiphlogistics in every form had been resorted to. The patient came to me under the anticipation that nothing could save him from necrosis of the angle of the bone.

I gave this man one and a half pounds of ether; it seemed impossible to get him into an anæsthetic condition, his physical suffering was so great. Prying his mouth open, just sufficient to introduce the key of Garengeot, I extracted, with much difficulty, the offending tooth. In three days he was again attending to his studies.

This peculiar lesion of a half-erupted wisdom tooth may well claim a moment's attention. Many a practitioner has been so deceived by the anomaly as to have been led widely astray in the study of his cases.

Where this condition exists, you will notice, by looking into the mouth, that only the anterior face of the tooth has fairly erupted, the other two-thirds being overlaid by the integuments of the ramus. You infer that the development is not yet perfected, and consequently it does not even strike you to associate disease with the parts; but this tooth, a single cusp of which is only through the gum, may have

caries extending into its pulp-cavity, or may be the seat of the most aggravated periodontitis. You know that it is the common impression that wisdom teeth decay early; that they are not a substantial class of teeth. The fact of the matter is that four-fifths of the wisdom teeth, which decay so early, have been destroyed by this opercula of gum. The explanation is very evident. The decomposing epithelial scales, and other debris of the mouth, combine in the acidity of their reaction with the bony structure of the tooth, thus quickly destroying its integrity. I am sure that I have seen more than a thousand cases illustrative of this fact; and if any practitioner will take the trouble to dissect off this opercula—the proper treatment by the way—and examine with a delicate probe the sulci of the tooth, in nine cases out of twelve he will find caries.

Such a lesion will at once be recognized to have important surgical relations. For example, I have been consulted time and again by persons who have been sufferers for a considerable period from what has been pronounced and treated as neuralgia. Their teeth had not escaped observation, but had been examined and pronounced sound. I have found in such mouths not unfrequently this opercula of gum overlying the wisdom tooth. This I have dissected off, exposing compound caries. I have extracted such teeth, and the patients have been instantly relieved of their neuro-odontalgia.

Again, these fleshy cups, catching and holding, in contact with the soft parts, insoluble particles, as often found mixed with the food, will provoke periostitis, or even ostitis of the angle and ramus of the jaw. I have seen the most alarming inflammatory attacks thus provoked. The tooth in these cases, as I have somewhere else remarked, will always respond to the stroke of the instrument—its periosteum being inflamed—common sense would direct that a tooth so diseased should be at once extracted; but such extraction is occasionally among the almost impossible things. A tooth so affected will not unfrequently have but a point erupted not larger than the head of a pin. In these cases the best thing that can be done is to extract the adjoining molar; this relieves the pressure on the ramus of the jaw, and gives room for the posterior tooth. It will commonly yield a cure.

Trismus, depending on such lesions, is not unfrequently the only external evidence yielded by the inflammatory attack. The jaw stiffens and relaxes, as an odontalgia will come and go. In such ephemeral cases it is not at all unlikely that the trismus is exclusively a nervous action, or reflected irritation to the molar branch of the trifacial—the slight local inflammatory action being the irritant.

Wisdom teeth erupt from the seventeenth to to the thirty-fifth year, generally, however, at about the twentieth year.

Four years ago I treated a case of trismus, the history of which is as follows:

The patient, David B., a farmer, after doing a hard day's work, and getting himself much overheated, threw himself, just at early evening, down in a cool outhouse to rest. Here he fell asleep, not waking until near midnight. The next day he felt a soreness in the left superior alveolar arch, which soreness increased for two or three days; after which it deserted the teeth and passed to the antrum. Then commenced a swelling in the integuments of the face, which advanced until it shut up completely the left eye. The jaws began to stiffen, and ended after three or four days more in complete immobility.

I was called to the case, after the lock-jaw had existed nine weeks, the patient having barely been able to support life by putting his mouth into a basin, filled with soup, and sucking the nutriment through his teeth. During this time he had been seen by seven different practitioners, no one of whom had seemed to appreciate his case, or what, perhaps, is more probable, none of whom had been willing to assume the trouble of it. The patient had never told any of these gentlemen about the soreness first felt in his teeth, and no one of them had ever questioned him in this direction; his single complaint was of a great weight about his cheek.

My diagnosis of the case was, primarily, periodontitis; this inflammation, by a double continuity of structure, had extended into the maxillary sinus, and to the integuments of the face. The inflammation of the antrum had been sufficiently severe to have resulted in abscess; abscess of the alveolo-dental membrane, or of the lining membrane of the cavity. The inflammation of the face had resulted in the exudation of lymph, which lymph in a state of coagulation was the cause of the trismus.

My first effort was directed to getting into the antrum, which I felt well assured was filled with pus. This was done by prying out the

second molar tooth with an elevator, pushing it into the mouth, from which, with some care, it was afterward gotten out; the extraction was followed by a profuse discharge of pus. The patient described the relief as being immense.

I removed this particular tooth, not because it was more carious than its fellows, but because it was somewhat loose, and thus gave evidence of the diseased condition of its periosteum. Again, it is through the alveolus of the palatine fang of this tooth that we find our easiest and best road to the antrum; in this case, as is seen, the fang communicated to the cavity.

On the day succeeding the evacuation of the abscess, the patient expressed himself as entirely free from pain, his only trouble being the trismus, which had not as yet relaxed in the least.

To the touch, all the parts about the articular extremity of the inferior maxilla seemed completely indurated. I hesitated to attempt the breaking up of the parts mechanically, fearing that thereby I might do injury to the important vessels which are associated with the head of this bone—the internal carotid, and internal maxillary arteries. The induration was, of course, extra capsular, and was of sufficient extent to have bound the jaw from the glenoid cavity to the anterior border of the masseter muscle; passive motion was resorted to, but employed very gently. Leeches, blisters, and sorbefacients were depended on—the case progressed very slowly, the patient having to come to my office every day for fifteen days; at the end of this time, but after removing other diseased teeth from his mouth, he was dismissed cured.

When one is called to a case of trismus of any standing, the anchylosis being the result of inflammatory action, questions may arise as to the propriety of mechanically breaking up the adhesions, the condyloid extremity of the maxillary bone is assuredly not the staunchest part of the body, and there are anatomical relations which it would not be at all pleasant to disturb—these things are for the surgeon to decide upon. So far as I, individually, am concerned, I now use mechanical force in all cases that come under my care, premising, of course, that the case is one, where, from inflammation, the trismus depends on effused lymph.

I am willing to run the risk for the great and immediate good yielded; some considerable experience in this direction assuring me that the risk is materially influenced by the manipulation. Of course I do not mean to recommend that attempt should be made to open the mouth to its greatest capacity with a single turn of the lever employed, although there are cases where such practice would be very commendable. I have so opened the mouth many a time, but not in cases of long standing. Generally, the force should be applied with gentleness, gain a little one day, and a little the next; it takes but a very short time to open a mouth in this way; besides, if your force is applied with such judgment as not to provoke inflammation, you will arouse to co-operation the absorbent system, the excitement acting as a stimulus to it, and it will be found to do its part vigorously.

A person will not unfrequently be attacked with trismus after the dental operation of inserting a pivot tooth. Here the lesion is inflammation, and the treatment is to be directed accordingly; the root of the tooth is in a state of periodontitis.

A person will sometimes be attacked with trismus after the operation of plugging a tooth with metal; the attack comes on suddenly; it is a reflex nervous action. The conducting facility of the metal irritates the nerve periphery in the pulp; this irritation is referred to the casserian ganglia, and thence reflected to the muscles of mastication; to prove the existence of this lesion, direct the patient to hold cold water in contact with the tooth.

Treatment.—Send the patient to his dentist and have the metal removed; when the irritation has subsided, direct that before re-filling, a non-conducting substance shall be placed between the metal and the floor of the cavity, or, because of the thinness of the bony septum, it may be desirable to destroy the pulp.

Spasmodic trismus, very obscure, may result from the employment of two different metals in the operation of tooth plugging, galvanic action is the consequence, and the nerve is subjected to a most harrassing irritation. To test for this trouble, increase the action by holding silver and zinc against the plug. This test, however, will irritate any pulp in a state of excitement, and is an admirable search warrant for obscure lesions of the organ. The treatment consists, of course, in the removal of the plug, and the medication, if required, of the irritated pulp.

So I might extend over many pages the con-

sideration of dental lesions in connection with trismus. I have, however, written enough, I presume, to direct a proper attention to the subject. Verbum sapienti.

To recapitulate—I suggest that most of the cases of so-called idiopathic or obscure trismus will be found to depend on conditions associated with the dental arch.

That to insure permanent relief, the treatment must include the primary lesion.

That such primary lesions as are described in the paper on "Anomalies," are always distinguishable.

That where it is desirable to extract an offending wisdom tooth, and such extraction seems too difficult to attempt, the extraction of the tooth immediately anterior to it will not unfrequently be found to meet the indications.

That the immobility of the jaw, where acute inflammatory action exists, is to be treated on general antiphlogistic or phlogistic principles, according as it seems probable or improbable that the inflammation may be resolved.

That when the acute action has passed, adhesions are to be broken up by mechanical force carefully applied.

That mechanico-dental lesions are not to be overlooked, but to be searched for, and discovered secundum artem.

(*To be continued.*)

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By a Hospital Surgeon of Philadelphia.

SECTION I.

(*Continued from page* 180.)

I will continue this section by giving the result of Dr. Rush's observations, made upon the diseases which occurred in the military hospitals of the United States during the Revolutionary war. In this section, we may recapitulate some of the hints given before; but anything from so distinguished a source is worthy of being read twice, and should be well digested, for he was the Sydenham of American medicine.

"The army, when in tents, was always more sickly than in the open air. It was likewise more healthy when it was kept in motion than when it lay in an encampment. Young men, under twenty years of age, were subject to the greatest number of camp diseases. The Southern troops were more sickly than the Northern or Eastern troops.

"The native Americans were more sickly than the natives of Europe who served in the American army. Men above thirty-and-five and thirty years of age were the hardiest soldiers in the army. Perhaps the reason why the natives of Europe were more healthy than the native Americans was, they were more advanced in life.

"The Southern troops sickened from the want of salt provisions; their strength and spirits were restored only by means of salted meat."

Dr. Rush states that he once saw a private in a Virginia regiment throw away his ration of choice, fresh beef, and give a dollar for a pound of salted bacon.

"Those officers who wore flannel shirts or waistcoats next to their skins, in general escaped fevers and diseases of all kinds."

"The principle diseases in the hospitals were the typhus, gravior, and mitior, (or typhoid.) Men who came into the hospitals with pleurisies or rheumatisms soon lost the types of their original diseases, and suffered or died by the above-mentioned states of fever."

No doubt produced by the want of proper air, light, space, ventilation, and warming.

"The typhus mitior (or typhoid) always prevailed most and with the worst symptoms in winter. A free air, which could only be obtained in summer, always prevented or mitigated it."

This can be obtained at all seasons if only your hospital is constructed in a proper manner, as I will show in this paper when we come to the subject of the sanitary condition and hospital construction.

"In all those cases where the *contagion* was received, cold seldom failed to render it active. Whenever a hospital was removed in winter, one-half of the patients generally sickened on the way or soon after their arrival at the place to which they were sent."

There are, we believe, at the present day, but two or three diseases which have a specific virus and can be propagated by inoculation; but even these are not contagious in the sense employed here by Dr. Rush; the word which should have been here used is "infection," which simply expresses a fact, and does not involve an hypothesis. Infection acts through the air. The air of Dr. Rush's hospital was poisoned, and, as soon as the sick were brought into it, they were affected by it, and these sick people were more susceptible than healthy if they were exposed to cold without sufficient

covering they must die, or, if they were shut up without sufficient space and sufficient fresh air, there will be produced not only fever but erysipelas, pyemia, and hospital gangrene.

"Drunken soldiers and convalescents were most subject to fever. Those patients in this fever who had large ulcers on their backs or limbs generally recovered."

Dr. Rush met with several instances of buboes, also ulcers in the throat, which were mistaken by some of the junior surgeons for venereal sores, but they yielded to the common remedies of the hospital fever. These ulcers, etc., being doubtless the results of land scurvy, were cured by proper diet, etc.

"There were many instances of patients in this fever who suddenly fell down dead upon being moved, without any previous symptoms of approaching dissolution. This was more especially the case when they arose to go to stool."

This should be prevented by the use of suitable bed-pans, keeping the patient horizontal.

"The contagion of this fever was frequently conveyed from the hospital to the camp by means of blankets and clothes."

As well observed by Miss Nightingale, what does "contagion" mean? It implies the communication of disease from person to person by contact; it presupposes the existence of certain germs like the sporules of fungi, which can be bottled up and conveyed any distance attached to clothing, to merchandise, especially to woolen stuffs, for which it is supposed to have a particular affection, and to feathers, which, of all articles, it especially loves—so much so that, according to quarantine laws, a live goose may be safely introduced from a plague country; but, if it happen to be eaten on the voyage, its feathers cannot be admitted without danger to the entire community. There is no end to the absurdities connected with this doctrine; suffice it to say, then, that, in the ordinary sense of the word, there is no proof—such as would be admitted in any scientific inquiry—that there is any such thing as "contagion."

"Those black soldiers who had been previously slaves died in greater proportion by this fever, or had a much slower recovery from it than the same number of white soldiers.

"The remedies which appeared to do most service in this disease were emetics of tartar-emetic, gentle doses of laxative salts, Peruvian bark, wine, carbonate of ammonia, opium, and blisters. An emetic seldom failed of checking this fever if exhibited while it was in a *forming* state, and before the patient was confined to bed.

"Many causes concurred to produce and increase this fever, such as the want of cleanliness, excessive fatigue, the ignorance or negligence of officers in providing suitable diet and accommodations for their men, the general use of linen instead of *woolen clothes* in the summer months, and the crowding too many patients together in one hospital, with such other inconveniences and abuses as usually follow the union of the *purveying and directing* departments of hospitals in the same persons. But there is one cause of this fever which remains to be mentioned, and that is the sudden assembling of a great number of persons together of different habits and manners, as the soldiers of the American army were in the years 1776 and 1777. Doctor Blane informs us, in his observations upon the diseases of seamen, 'that it sometimes happens that a ship, with a long-established crew, shall be very *healthy*, yet if strangers are introduced among them, who are also *healthy*, sickness will be mutually produced.' The history of diseases furnishes many proofs of the truth of this assertion.*

"It is very remarkable that, while the American army at Cambridge, in the year 1775, consisted only of New England men, whose habits and manners were the same, there was scarcely any sickness among them. It was not till the troops of the Eastern, Middle, and Southern States met at New York and Ticonderoga, in the year 1776, that the typhus became universal, and spread with such peculiar mortality in the armies of the United States.

"The dysentery prevailed in the summer of 1777 in the military hospitals of New Jersey, but with very few instances of mortality. The dysentery was frequently followed by obstinate diarrhœa, in which the warm bath was found, in many cases, to be an effectual remedy.

"In gun-shot wounds of the joints, W. Ranby's advice of amputating the limb was followed with success. Dr. Rush saw two cases of death where the advice was neglected. There was one instance of a soldier who lost his hearing, and another of a soldier who had been deaf who recovered his hearing by the noise of artillery in battle.

"Those soldiers who were billeted in private houses generally escaped the hospital fever, and recovered soonest from all their diseases. In fevers and dysenteries, those soldiers recovered most certainly and most speedily who lay at the greatest distance from the walls of the hospital.

"Soldiers are but little more than adult children. That officer, therefore, will best perform his duty to his men who obliges them to take the most care of their *health*.

* Cleanliness is founded on a natural aversion to what is unseemly and offensive in the persons of others; and there seems, also, to be an instinctive horror at strangers, implanted in human nature for the same purpose, as is visible in young children and uncultivated people. In the early ages of Rome, the same word signified both a stranger and an enemy.—*Dr. Blane*, p. 225.

"Hospitals are the sinks of human life in an army. They robbed the United States of more citizens than the sword.

"Humanity, economy, and philosophy, all concur in giving a preference to the conveniences and wholesome air of private houses; and, should war continue to be the absurd and unchristian mode of deciding national disputes, it is to be hoped that the progress of science will so far mitigate one of its greatest calamities as to produce an abolition of hospitals for acute diseases.

"Perhaps there are no causes of sickness in which reason and religion do not forbid the seclusion of our fellow-creatures from the offices of humanity in private families, except where they labor under the calamities of madness and the venereal disease, or where they are the subjects of some of the operations of surgery."

These observations of Dr. Rush's upon the subject of the hospitals of his day were too true, and even down to our day there are but few hospitals built upon true principles. During a recent visit to Europe, but one of the hospitals was found a fit receptacle for cases of acute diseases; this was in France—that of Lareboisière at Paris; in it we have what Dr. Rush desired, separate houses or hospitals—six of them containing each only about one hundred sick. The squares within these hospitals and the spaces between the pavilions are laid out in grounds. All the blocks are joined together by a glazed corridor along the lower flat, and by an open terrace above for convalescents taking exercise. The only defect of this model hospital is that it is built in the city of Paris. No general hospital, at the present day, should be erected within a city, and especially a military one. The following are the best rules for hospital construction:

(*To be continued.*)

On Wounds of the Intestines.

By P. W. Ellsworth, M.D.,
Of Hartford, Conn.

Will you permit a suggestion respecting sutures in wounded intestines? As we are likely now to have lively work, and our Southern friends may make free use of their bowie knives, (which fortunately are broad enough to permit a wounded intestine to be visible,) it may be of use to examine the efficacy of a suture I have not seen described, and which meets every indication. The desideratum is to bring serous surfaces together, and have the thread quickly and certainly drop into the bowel instead of the peritoneal cavity. The following is my method: A threaded needle is thrust *entirely* through from without inward as close as possible to the edge of the cut at one end of the wound; then from within outward a line further back fom the edge; then it is thrust through by the side of this last puncture, and at the same distance from the edge, but further along the cut. The needle is now brought forward a half line from (or close to) the edge of the wound by the side of the thread going through the first puncture. Thus the needle has passed four times through one side of the wound. Now it is carried over to the opposite side, and the same is done there, only reversing the order, viz: through the edge, opposite the last puncture, and from without inward; then a line back of this from within outward; then by the side of this, only toward the end of the wound, where the stitch commenced, and penetrating from without inward; then back from within outward close to the edge. Thus the needle goes through four times on this side, and leaves the ends of the thread close to the edge, opposite each other, and hanging outward. When the wound is drawn *moderately* together, the edges must be turned a little inward by a probe, and ends of the thread tied; the knot is to be thrust by the forceps down into the fissure between the sides of the wound, and will be invisible. Nothing can be seen but a small portion of thread, according to the length of stitch, pulling opposite to a corresponding portion, and, of course, drawing inwardly toward the cavity of the bowel. In two hours these threads will be coated with lymph, and no effusion can possibly occur when the threads cut through toward the cavity of the intestine, as they certainly will do. Thus the wound is as favorably situated for union as a cut on the skin. The following shows the method:

Each stitch must be independent, and the same process must be gone through with each. The suture may be coarse or fine, according to the portion injured or the wish of the operator.

It may be a little difficult to understand this at first, but I recommend persons to follow the description with a needle and thread on a roll of paper. The practical application to a wound

will be found easier and will take but little longer time than Guthrie's stitch. When completed, nothing is left to be desired, as the junction is almost invisible if properly made, and in two hours would be completely so. I resorted to this method, a few days since, on a person shot through the abdomen, near the umbilicus, with a charge of small shot. I was abundantly satisfied with the suture and ease of application, though the individual died an hour or two afterward, owing to other complications. I hope these suggestions will be found useful.

EDITORIAL DEPARTMENT.

PERISCOPE.

DIRECTIONS TO ARMY SURGEONS ON THE FIELD OF BATTLE.

The following, taken from Mr. G. J. Guthrie's pamphlet on the Hospital Brigade, we copy from the *Lancet*. Mr. Guthrie was Surgeon-General to the British forces during the Crimean war, and consequently speaks from extensive opportunities of observation:

1. Water being of the utmost importance to wounded men, care should be taken, when before the enemy, not only that the barrels attached to the conveyance-carts are properly filled with good water, but that skins for holding water, or such other means as are commonly used in the country for carrying it, should be procured and duly filled.

2. Bandages or rollers, applied on the field of battle, are, in general, so many things wasted, as they become dirty and stiff, and are usually cut away and destroyed, without having been really useful; they are therefore not forthcoming when required, and would be of no use.

3. Simple gun-shot wounds require nothing more for the first two or three days than the application of a piece of wet or oiled linen, fastened on with a strip of sticking-plaster, or, if possible, kept constantly wet and cold with water. When cold disagrees, warm water should be substituted.

4. Wounds made by swords, sabres, or other sharp-cutting instruments, are to be treated principally by position. Thus, a cut down to the bone, across the thick part of the arm, immediately below the shoulder, is to be treated by raising the arm to or above right angle with the body, in which position it is to be retained, however inconvenient it may be. Ligatures may be inserted, but through the skin only. If the throat be cut across in front, any great vessels should be tied, and the oozing stopped by a sponge. After a few hours, when the oozing is arrested, the sponge should be removed, and the head brought down toward the chest, and retained in that position without ligatures; if this is done too soon, the sufferer may possibly be suffocated by the infiltration of blood into the areolar tissue of the parts adjacent.

5. If the cavity of the chest is opened into by a sword or lance, it is of the utmost importance that the wound in the skin should be effectively closed, and this can only be done by sewing it up as a tailor or a lady would sew up a seam, skin only being included; a compress of lint should be applied over the stitches, fastened on by sticking plaster. The patient is then to be placed on the wounded side, that the lung may fall down, if it can, upon or apply itself to the wounded part, and adhere to it, by which happy and hoped-for accident life will in all probability be preserved. If the lung should be seen protruding in the wound, it should not be returned beyond the level of the ribs, but be covered over by the external parts.

6. It is advisable to encourage previously the discharge of blood from the cavity of the chest, if any have fallen into it; but if the bleeding from within should continue, so as to place the life of the sufferer in danger, the external wound should be closed and events awaited.

7. When it is doubtful whether the bleeding proceeds from the cavity of the chest or from the intercostal artery (a surgical bugbear,) an incision through the skin and the external intercostal muscle will expose the artery close to the edge of the rib, having the internal intercostal muscle behind it. The vessel thus exposed may be tied, or the end pinched by the forceps, until it ceases to bleed. Tying a string round the ribs is a destructive piece of cruelty, and the plugs, etc., formerly recommended, may be considered as surgical incongruities.

8. A gun-shot wound in the chest cannot close by adhesion, and must remain open. The position of the sufferer should therefore be that which is most comfortable to him. A small hole penetrating the cavity is more dangerous than a large one, and the wound is less dangerous if the ball goes through the body. The wounds should be examined, and enlarged if necessary, in order to remove all extraneous substances, even if they should be seen to stick on the surface of the lungs; the opening should be covered with soft oiled or wet lint—a bandange when agreeable. The ear of the surgeon and the stethoscope are invaluable aids, and ought always to be in use; indeed, no injury of the chest can be scientifically treated without them.

9. Incised and gun-shot wounds of the abdomen are to be treated in *nearly* a similar manner; the position in both being that which is most agreeable to the patient, the parts being relaxed.

10. In wounds of the bladder, an elastic catheter is generally necessary. If it cannot be passed, an opening should be made in the perinæum for the evacuation of the urine, with as little delay as possible.

11. In gun-shot fractures of the skull, the loose broken pieces of bone, and all extraneous substances, are to be removed as soon as possible, and depressed fractures of bone are to be raised. A deep cut made by a heavy sword through the bone into the brain, generally causes a considerable depression of the inner table of the bone, whilst the outer may appear to be merely divided.

12. An arm is rarely to be amputated, except from the effects of a cannon-shot. The head of the bone is to be sawn off, if necessary. The elbow-joint is to be cut out, if destroyed, and the sufferer, in either case, may have a very useful arm.

13. In a case of gun-shot fracture of the upper arm, in which the bone is much splintered, incisions are to be made for the removal of all the broken pieces which it is feasible to take away; the elbow is to be supported; the forearm is to be treated in a similar manner; the splints used should be solid.

14. The hand is never to be amputated, unless all or nearly all its parts are destroyed. Different bones of it and of the wrist are to be removed when irrecoverably injured, with or without the metacarpal bones and fingers or the thumb; but a thumb and one finger should always be preserved when possible.

15. The head of the thigh-bone should be sawn off when broken by a musket-ball. Amputation at the hip-joint should only be done when the fracture extends some distance into the shaft, or the limb is destroyed by cannon-shot.

16. The knee-joint should be cut out when irrecoverably injured; but the limb is not to be amputated until it cannot be avoided.

17. A gun shot fracture of the middle of the thigh, attended by great splintering, is a case for amputation. In less difficult cases, the splinters should be removed by incisions, particularly when they can be made on the upper and outer side of the thigh. The limb should be placed on a straight, firm splint. A broken thigh does not admit of much, and sometimes of no extension, without an unadvisable increase of suffering. An inch or two of shortening in the thigh does not so materially interfere with progression as to make the sufferer regret having escaped amputation.

18. A leg injured below the knee should rarely be amputated in the first instance, unless from the effects of a cannon-shot. The splinters of bone are all to be immediately removed by saw or forceps, after due incisions. The limb should be placed in iron splints, and hung on a permanent frame, as affording the greatest comfort and probable chance of ultimate success.

19. An ankle-joint is to be cut out, unless the tendons around are too much injured, and so are the tarsal and metatarsal bones and toes. Incisions have hitherto been too little employed in the early treatment of these injuries of the foot for the removal of extraneous substances.

20. A wound of the principal artery of the thigh, in addition to a gun-shot fracture, renders immediate amputation necessary. In *no other part* of the body is amputation to be done in the first instance for such injury. Ligatures are to be placed on the wounded artery; one above, the other below the wound, and events awaited.

21. The occurrence of mortification in any of these cases will be known by the change of color in the skin. It will rarely occur in the upper extremity, but will frequently do so in the lower. When about to take place, the color of the skin of the foot changes from the natural flesh color to a tallowy or mottled white. Amputation should be performed immediately above the fractured part. The mortification is yet local.

22. When this discolorization has not been observed, and the part shrinks, or gangrene has set in with more marked appearances, but yet seems to have *stopped* at the ankle, delay is, perhaps, admissible, but if it should again spread, or its cessation be doubtful, amputation should take place forthwith, although under less favorable circumstances. The mortification is becoming or has become constitutional.

23. Bleeding, to the loss of life, is not a common occurrence in gun-shot wounds, although many do bleed considerably, seldom, however, requiring the application of a tourniquet as a matter of necessity, although frequently as one of precaution.

24. When the great artery of the thigh is wounded, (not torn across,) the bone being *uninjured*, the sufferer will, probably, bleed to death, unless aid be afforded, by making compression above and on the bleeding part. A long, but not broad, stone, tied sharply on with a handkerchief, will often suffice until assistance can be obtained, when both ends of the divided or wounded artery are to be secured by ligatures.

25. The upper end of the great artery of the thigh bleeds scarlet blood; the lower end dark venous-colored blood; and this is not departed from in a case of accidental injury, unless there have been previous disease in the limb. A knowledge of this fact or circumstance, which continues for several days, will prevent a mistake at the moment of injury, and at a subsequent period, if secondary hæmorrhage should occur. In the *upper* extremity both ends of the principal artery bleed scarlet blood, from the free collateral circulation and from the anastomoses in the hand.

26. From this cause, mortification rarely takes place after a wound of the principal artery of the arm or even of the arm-pit. It *fre-*

quently follows a wound of the principal artery in the upper, middle, or even lower parts of the thigh, rendering amputation necessary.

27. It is a great question, when the bone is *uninjured*, where and at what part the amputation should be performed. Mortification of the foot and leg, from such a wound, is disposed to stop a little below the knee, if it should not destroy the sufferer; and the operation, if done in the first instance, as soon as the tallowy or mottled appearance of the foot is observed, should be done at that part; the wound of the artery and the operation for securing the vessel above and below the wound being left unheeded. By this proceeding, when successful, the knee-joint is saved, whilst an amputation above the middle of the thigh is always very doubtful in its result.

28. When mortification has taken place from any cause, and has been arrested below the knee, and the dead parts show some sign of separation, it is usual to amputate above the knee. By not doing it, but by gradually separating and removing the dead parts, under the use of disinfecting medicaments and fresh air, a good stump may be ultimately made, the knee-joint and life being preserved, which latter is frequently lost, after amputation, under such circumstances.

29. Hospital gangrene, when it unfortunately occurs, should be considered to be contagious and infectious, and is to be treated locally by destructive remedies, such as nitric acid, and the bivouacking or encamping of the remainder of the wounded, if it can be effected, or their removal to the open air.

30. Poultices have been very often applied in gun-shot wounds, from laziness or to cover neglect, and should be used as seldom as possible.

31. Chloroform may be administered in all cases of amputation of the upper extremity and below the knee, and in all minor operations; which cases may also be deferred, without disadvantage, until the more serious operations are performed.

32. Amputation of the upper and middle parts of the thigh are to be done as soon as possible after the receipt of the injury. The administration of chloroform in them, when there is much prostration, is doubtful, and must be attended to, and observed with great care—the question whether it should or should not be administered in such cases being undecided.

33. If the young surgeon should not feel quite equal to the ready performance of the various operations recommended, many of them requiring great anatomical knowledge and manual dexterity, (and it is not to be expected that he should,) he should avail himself of every opportunity which may offer of perfecting his knowledge.

The surgery of the British army should be at the height of the surgery of the metropolis; and the medical officers of that service should recollect that the elevation at which it has arrived has been, on many points, principally due to the labors of their predecessors during the war in the Peninsula. It is expected, then, that they will not only correct any errors into which their predecessors may have fallen, but excel them by the additions their opportunities will permit them to make in the improvement of the great art and science of surgery.

PAINLESS DESTRUCTION OF HÆMORRHOIDAL TUMORS BY THE SOLID VIENNA PASTE.

It will be remembered that some years since M. Piedagnel suggested the addition of a certain amount of morphia to escharotic powders, in order to diminish the pain which is induced by their application. M. Amussat recently resorted, with entire success, to the anæsthetic compound recommended by M. Piédagnel, in the case of a woman suffering from hæmorhoids. The cup of the compressor was filled with Vienna caustic, combined with one-twelfth of a grain of muriate of morphia. The instrument was applied for four minutes, during which the patient experienced scarcely any pain. It was only after the removal of the forceps that she complained of slight smarting. We would, however, not be understood to state that in all cases the association of caustics with morphia will produce perfect local anæsthesia. Several surgeons have had recourse to the plan, without, as we are aware, attaining this desirable result. As its efficacy is somewhat doubtful, we would recommend that a self-acting enema be held in readiness, in case of pain supervening.—*Dublin Medical Press.*

RELIEF OF THE PAIN OF GOUT.

A writer in the *Lancet* says that the pain of gout may be relieved by pressure on the part, as in the joint of the toe, by putting first on the painful spot a pad of cotton wadding, and then binding it tightly with a bandage enclosing the whole foot.

Antiquity of the Water-Cure.—We have just noticed in the writings of Celsus, in the first century, what was, perhaps, the earliest application of the water-cure. The administration was quite up to the modern style of heroic hydropathy. The disease in which he recommends it is hydrophobia, and the following is the method of applying the remedy:

"Throw the patient unexpectedly into a fish-pond, and, if he be unable to swim, keep him for some time immersed, so as to make him swallow a portion of the water, and then raise him out of it, alternately immersing and emerging him; but, if able to swim, he should be kept in the same manner at times immersed by force, so as to be surfeited with water; by which means both the thirst and the dread of water will be effectually subdued."

REVIEWS AND BOOK NOTICES.

A Manual of Military Surgery; or, Hints on the Emergencies of Field, Camp, and Hospital Practice. Illustrated with wood-cuts. By S. D. Gross, M.D., Professor of Surgery in the Jefferson Medical College of Philadelphia. Philadelphia: Lippincott & Co. 1861. 12mo. 186 pages.

The general attention to military matters, which is now epidemic, has not left the medical profession unaffected. Practitioners are leaving their peaceful domains, and are rushing, if not to arms, to lancets and catlins in the tented field. The medical literati, who are generally anemic, and have but little blood to spare, are, instead, patriotically shedding their ink in the cause. If "the pen is mightier than the sword" in making wounds, it is also mighty in healing them. In this spirit has the above-titled brochure sprung, Venus-like, from the froth of a troubled sea, and although the oil it pours out may not assuage the maddened waters, it will do something toward healing the wounds which the tempest may inflict.

The universal attention of readers to war matters, and the check which the financial state of the country has given to publishing, will cause but little literature which has not a military bearing to be brought forth. We may expect a great addition to our national medical literature, in the way of military surgery—a department in which the country may be said to have hitherto been wholly deficient.

The second part of the title of the work—"Hints on the Emergencies of Field, Camp, and Hospital Practice," gives a correct idea of its scope. It is truly a book for emergencies; not a full didactic treatise, but one appropriate when, as the author quotes, "L'occasion est urgente, le judgment difficile." It is a timely book, as said in the preface, "for those who have so hurriedly entered the volunteer service, perhaps not always with a full knowledge of the weighty responsibilities of their position;" and it is notorious that many such have been accepted into the service, and are, unfortunately, to be trusted with the lives of brave men who have a right to demand from their country the best medical services.

Some who now, for the first time, commence the study of military surgery, will be deceived in not finding it a simple abstraction which may be learned by any one without a basis for general surgical qualification. Military surgery is nothing but the application of ordinary surgery to a certain class of injuries. "The difference consists in the application of our knowledge, rather than in its range or depth."

In regard to the number of surgeons requisite for efficiency, Dr. Gross says that every regimental surgeon should have, at least, two assistants in time of peace, or during the inactivity of the troops under his charge; when on active duty, on the contrary, the number should be, at least, double, especially in the face of an anticipated bloody engagement. The recent apportionment, by the government, of but one surgeon to a regiment, ranking as an assistant, and but one to a brigade, and one to a division, shows an indifferance to the efficiency of the medical department, which is without precedent in any civilized nation, and which, in view of terrible conflicts, must result disastrously, and prove a discredit to the authorities.

With this arrangement, there may be at the time of an action but seven surgeons, of all grades, to a division of four thousand or more men.

A brief but practical account of the necessary medical equipments, stores, and hospitals, the means of conveying the wounded from the field of battle, and the construction of litters, formation of ambulances, etc., form a highly-interesting chapter.

In the chapter on wounds and other injuries, we are glad to see that the author does not always recommend the fashionable and much-abused water-dressing. In very many instances, as where the integument can be closed over a wound, and where inflammation does not already exist, a *dry* dressing is preferable, and is much more convenient in field service.

The instruction on the means of arresting hemorrhage could not have been improved by a lengthy monograph on the subject.

In the treatment of wounds of joints the necessity of free drainage of pus from their cavities is not insisted on. The great fatality of wounds of the joints, particularly of the knee, is, we think, owing to the old prejudice which exists against making free incisions into articulations for the complete exit of diseased secretions. The author remarks, that in gunshot wounds of the knee-joint, "if the patient survives for any length of time, large abscesses are apt to form in and around the joint, the matter burrowing extensively among the muscles, and causing detachment of the periosteum with caries and necrosis of the bones." Now, these secondary effects can be prevented, as we have repeatedly had occasion of seeing, by free incisions on both sides of the articulation, so as to effect complete drainage, or the same may sometimes be accomplished by keeping the original wound freely open.

In amputations, the flap operation is, especially where the duty is great after a battle, decidedly recommended on account of the rapidity of the procedure, the abundant covering for the end of the bone, and the prospect which it gives of immediate union. To this might have been added the better shape of stump which it makes for the adaptation of an artificial limb.

The chapters on Military Medicine, Military Hygiene, Disqualifying Diseases, Feigned Diseases, Medical, Surgical, and Dietetic Formulæ, give a great amount of essential information in a small space.

The book is properly styled a manual, and is truly one for the exigencies of the times, being as succinct, yet withal as comprehensive, as possible.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, JUNE 1, 1861.

THE APOTHEOSIS OF SURGERY.

It hardly needed the stimulus of an impending war to popularize surgery with the junior candidates for position in the medical profession. Whether from an innate liking for blood, or an indefined notion that surgery "pays" better than other branches of the practice, or, again, that the labors of the surgeon are more tangible and, therefore, better appreciated by the public—the small matter of its being bold, dashing, and reckless of consequences, or conservative, prudent, and chary of life and limb, being of comparatively minor importance, though with a disposition to favor the dashing surgeon—this branch of the practice of our profession seems to be specially attractive to those who are about commencing their career, whether as medical students or young practitioners. We have known a young man, who had chosen medicine as his profession, even before he had begun his studies, and while still pursuing his collegiate course, provide himself with a full set of instruments, in all departments of surgical practice, at a very heavy cost; and who has not seen the newly-fledged graduate adopt the buff-colored vest, metal buttons, and military coat, indicating a desire to impress upon the public that he is a surgeon! A little experience, however, in the practice of his profession, soon measures his capacity and places him where he belongs.

But the exigencies of the times, both in this country and in Europe, are calling into existence an army of surgeons, who may have an abundance of employment. Consequently this branch of our profession is receiving a large share of public and professional notice. We are glad to know that a great many very worthy men—men with peculiar talents and fitness for their position—are, in our country, enlisting as army surgeons, while, at the same time, it is not to be denied that, in the haste with which our army has been organized, others have entered the field who can present no claim whatever to the title of surgeon. The former, should opportunities unfortunately offer, will distinguish themselves, and contribute largely to the health, comfort, and welfare of our armies, while the latter can only bring confusion on themselves and disgrace on their profession.

In some sense, surgeons, like poets, are born, not made, but he who would be a good surgeon must, be his natural bent ever so strong, prepare himself by an intelligent use of his faculties, and their application in directions which will aid him when his knowledge is to be brought to the test of a practical application. The student is too apt, while listening to the demonstrative and interesting lectures of the professor of surgery, to overlook the great importance of the less attractive lectures on anatomy. And yet a thorough knowledge of anatomy is an indispensable quality in a good surgeon. Without it a man may be a very accomplished butcher, but scarcely a surgeon. We wish, therefore, to impress upon the minds of the younger portion of our readers especially, the great importance of a thorough knowledge of anatomy.

The Army Medical Board is now in session in New York, and the exigencies of the service require the immediate appointment of about thirty assistant-surgeons. It is known that the examinations of this Board are very rigid, and the requirements of a very high order. There are no students who apply themselves more closely to their studies than those who expect to come before the Army or Naval Medical Boards.

The import of the term *Surgeon*, as applied to the Army or Navy service, must not be misapprehended. It is well known that surgeons in the public service have many cases of sickness of various kinds to treat to one strictly surgical injury, so that a thorough knowledge of the principles of the practice of medicine as well as surgery is indispensable. The army surgeon cannot, when an epidemic of fever or dysentery is raging in his camp, claim that he is a surgeon par excellence, and not a physician. It is possible that those who are now receiving appointments as surgeons in the Army may

have gun-shot and bayonet wounds to dress, and other surgical injuries to treat; but it is certain that in an army of several hundred thousand men there will be a great deal of sickness that will demand the greatest care and attention, and the most consummate ability to treat properly.

We trust that our readers will not overlook the true qualifications of the good army surgeon, and that the occasion will develop many such.

It is greatly to be deplored that the political troubles in the land should interfere so much with the proceedings of our medical organizations throughout the country. But it has been deemed best to postpone for a year the annual meetings of all our national medical and scientific associations. The result may prove the wisdom of the course. Had some of our religious bodies pursued a like policy, we doubt not it would have been better for them.

But we cannot see the necessity or wisdom of bringing the political affairs of the country into our local medical organizations, and trust that it will be scrupulously avoided. We do not know what peculiar aggravations there may have been in the case mentioned by a correspondent in New York, but if Dr. Thomas' interests impelled him to remain in New York rather than leave the city, we think that a truly wise course might have prevented any misunderstanding between him and the Academy.

The mails having been temporarily discontinued in a portion of the Southern States, we shall, of course, be compelled for the present to cease mailing the Reporter to subscribers in those States. We shall take the earliest opportunity of supplying our subscribers in those States with their numbers, and will keep a supply of numbers to enable us to complete their files.

—o—

A New Hampshire Regiment of Volunteers, which passed through this city this week, had a corps of fifty women to act in the capacity of nurses to the regiment. They were dressed in a semi-military uniform, and had the appearance of being a very intelligent and efficient corps. The regiment, also, had a hospital-wagon supplied with medicines, instruments, and all the paraphernalia necessary for field hospital service.

Correspondence.

New York, May 20, 1861.

The Academy of Medicine had hardly disposed of a vexatious question when, at its last meeting, another was forced upon its consideration, which threatens to shake its very existence. We were perfectly right in stamping the proceedings against Dr. Lewis A. Sayre as persecution of a very disreputable character, and the question "on morbus-coxarius" a mere pretext to bring the subject before the Academy in a tangible form. Dr. Watson was indiscreet enough to let the "cat out of the bag" in winding up his long-winded speech with the following remark: "And, as I understand Dr. Sayre is now willing to do justice to Dr. Davis, there need be no further discussion upon the subject." There it is! The Academy of Medicine is the scape-goat to bring Dr. Davis prominently before the public, to give him an advertising puff, to render a man publicly notorious whose entire ambition hitherto was confined to making and fitting some mechanical apparatus, and this for no other purpose than to give a distinguished member of the profession a *coup de grace*. This time, however, the conspirators had over-rated their aggregate strength. Numerous as they were, and keen as their tactics were laid, they could not stand the weight of arguments and facts. Their position and acquirements did not rise up to the present time. All they had to say might have easily been collected from a few antiquated hand-books or students' "vade-mecums" on surgery. Whereas the bomb-shells of modern knowledge and observation most skillfully thrown by Drs. Sayre and Bauer knocked their whole fragmentary armory into "pi."

The censure thus craftily prepared for Dr. Sayre was converted into a eulogy, and his merits in the premises fully recognized in having rendered useful and accessible to every surgeon an instrument the great virtues of which had evidently not been divined by its inventor.

It may be easily imagined that, when the discussion took this unexpected turn, Dr. Watson should have plaintively vociferated "there is no need for further discussion." But the draught had to be swallowed to the very dregs, and not before the victory of truth and merit had been fully accomplished was the curtain allowed to drop and cover the vanquished.

It was a most unfortunate attempt to mix scientific purposes and pursuits with ethics and discipline; and in no other country have such attempts been made. It is but just to presume that the liberal profession of medicine is constituted of men of honor, integrity, and social refinement; and for such men the code of ethics is engrafted upon their very nature—a written code seems to be superfluous.

For men of low character, without the principle of right and wrong, justice or prosperity, the cowhide is the only regulator. Whenever difficulties arise between individual practitioners, scientific bodies are obviously no forum of adjustment; and we know numerous instances in which the assumed jurisdiction has proved destructive to most prosperous and promising medical societies.

But absurd and outrageous is the attempt at constituting a scientific body the tribunal of *political* opinion. Not unfittingly has Abernethy compared medical science with a "republic, one and indivisible, which may comprise all who assiduously labor for its cause, irrespective of nationality, religion, or politics." History furnishes many instances in which scientific associations extended their protecting hand over the persecuted; and this is only becoming the high and generous character of scientific elevation.

At a time like the present, when our beloved country is threatened with intestine strife and civil war, when all ties of blood and relationship become loose and disrupted, when passion and fanaticism raise their horrid war-whoop! where shall we expect that calmness, that humane forbearance of our mutual frailties and short-comings, if it is not to be found in the halls devoted to medical science, where the true Samaritans meet. And yet the many-headed hydra of political passion ventures to pollute the sanctified halls of science by her presence, and convert them into a Jacobin club. The scene enacted at the last meeting of the Academy of Medicine cannot have failed to fill every high-minded member with deep regret and sorrow.

Dr. Thomas, the present Secretary of the Academy, whose scientific acquirements, inoffensive gentlemanly demeanor, and obliging disposition, have led to this high official distinction, and have given him a very highly-respected position in the profession at large, is a man of Southern birth, and in these times of excitement, in the eyes of some over-zealous individuals, this is quite enough to stigmatize him as a suspicious, traitorous individual. Anxious, perhaps, to make political capital, or, at least, make a public display of their patriotism, two members of the Academy rose in remonstrance against Dr. Thomas' acting any further in his official capacity. They brought forth no special charges; they did not impeach his character as a man or physician; they did not charge him with negligence of official duty; they simply insisted on his removal, for no feasible cause at all. It is but just to say, that an overwhelming majority of the Academy resisted such an attempt, but the whole session was consumed with these bickerings, and the members left disgusted with the proceedings and the misuse of their time. We abstain from mentioning the names of the aggressors, in order not to subserve their designs for public notoriety. But this much we will say, that the Academy would be relieved of a great incubus if it would get rid of these very individuals, who can but tend to lower its character.

The Academy has outlived many misuses and intestine strife, but if it submits to political pollution, it fully deserves to descend to oblivion, and the sooner the better.

Manhattan.

NEWS AND MISCELLANY.

Military Hospital of the Department of Pennsylvania.—This hospital institution, which has been established under the auspices of the Home Guard, is under the immediate control of the Medical Director, Dr. John Neill. The hospital staff consists of five surgeons, including the Medical Director and four Assistant-Surgeons. There is, also, provision for the appointment of Resident Physicians, only one at present being selected, and for an increase of the staff, as exigencies may necessitate.

The staff at present consists of the Medical Director, Dr. Neill, with Surgeons Hollingsworth, F. G. Smith, M'Clellan, and Hopkinson, and Assistant-Surgeons Wallace, Lewis, Packard, and Brinton. Dr. Boardman is Resident-Physician, and the Secretary is Dr. J. R. Paul. These officers hold their rank from authority of the State by the act instituting the Home Guard.

The hospital accommodations have been inspected and accepted by the general government as a military hospital, and soldiers from any regiment in the military department of Pennsylvania, which, we believe, also includes the States of Delaware and Maryland, are entitled to the benefits of the institution.

The Moyamensing Hall has been appropriated and properly fitted up, with fifty beds, for the accommodation of patients, and is styled Military Hospital Number One. At the present time it contains thirty-five patients. These are partly from the regularly-accepted and mustered regiments, and the benefits have, also, been extended to the sick and injured of companies which are formed and are awaiting inspection and acceptance.

The use of the Moyamensing House of Industry, with its furniture, has been obtained, and is styled Hospital Number Two. The Ladies' House of Employment, at Seventeenth and Market streets, will be properly fitted when required, and will be Hospital Number Three.

Accommodation has thus been arranged for between two and three hundred patients.

The establishment and support of this hospital department has been entirely accomplished by the patriotic and benevolent contributions of citizens of Philadelphia.

The hospital administration is conducted in

the systematic manner of national military hospitals, and the newly-appointed surgeons of volunteer regiments might, by visiting the hospital, learn an important part of their duty in keeping the requisite records and supply table.

The Gorilla.—Mr. J. B. Du Chaillou, the most recent explorer of Africa, and who has traversed regions which were previously unknown, gives, in the history of his travels, the following account of a gorilla hunt, and some of the characteristics of the animal:

"The singular noise of the breaking of tree-branches continued. We walked with the greatest care, making no noise at all. The countenances of the men showed that they thought themselves engaged in a very serious undertaking; but we pushed on, until finally we thought we saw through the thick woods the moving of the branches and small trees which the great beast was tearing down, probably to get from them the berries and fruits he lives on.

"Suddenly, as we were yet creeping along, in a silence which made a heavy breath seem loud and distinct, the woods were filled with the tremendous barking roar of the gorilla.

"Then the underbrush swayed rapidly just ahead, and presently before us stood an immense male gorilla. He had gone through the jungle on his all-fours; but when he saw our party he erected himself and looked us boldly in the face. He stood about a dozen yards from us, and was a sight I think never to forget. Nearly six feet high, with immense body, huge chest, and great muscular arms, with fiercely-glaring, large, deep-gray eyes, and a hellish expression of face, which seemed to me like some nightmare vision: thus stood before us this king of the African forests.

"He was not afraid of us. He stood there, and beat his breast with his huge fists till it resounded like an immense bass drum, which is their mode of offering defiance; meantime giving vent to roar after roar.

"The roar of the gorilla is the most singular and awful noise heard in these African woods. It begins with a sharp *bark* like an angry dog, then glides into a deep bass *roll*, which literally and closely resembles the roll of distant thunder along the sky, for which I have sometimes been tempted to take it, where I did not see the animal. So deep is it that it seems to proceed less from the mouth and throat than from the deep chest and vast paunch.

"His eyes began to flash fiercer fire as we stood motionless on the defensive, and the crest of short hair which stands on his forehead began to twitch rapidly up and down, while his powerful fangs were shown as he again sent forth a thunderous roar. And now truly he reminded me of nothing but some hellish dream creature—a being of that hideous order, half man half beast, which we find pictured by old artists in some representations of the infernal regions. He advanced a few steps—then stopped to utter that hideous roar again—advanced again, and finally stopped when at a distance of about six yards from us. And here, as he began another of his roars and beating his breast in rage, we fired, and killed him.

"With a groan which had something terribly human in it, and yet was full of brutishness, it fell forward on its face. The body shook convulsively for a few minutes, the limbs moved about in a struggling way, and then all was quiet—death had done its work, and I had leisure to examine the huge body. It proved to be five feet eight inches high, and the muscular development of the arms and breast showed what immense strength it had possessed."

DEATH.

Seusenny.—In Chambersburg, Pa., May 16, Wm. D. Seusenny, M.D. Dr. Seusenny was much beloved by the people of Chambersburg and vicinity, as a physician and citizen, and possessed, in an eminent degree, the respect and confidence of the profession. At a meeting of the profession of Chambersburg and vicinity, on the 17th, resolutions of respect and condolence were passed.

Answers to Correspondents.

W. S.—Drs. Wilson Jewell and Joseph Carson, of this city, have each very large and rare collections of antique portraits of medical men. They are, probably, the most valuable of the kind in the country, and have been the result of much labor and expense.

B. J.—The examination of candidates for posts of Division, Brigade, Regimental, and Assistant-Surgeon in the volunteer forces, commenced at Harrisburg on Thursday last, the 30th ult. This examining board does not determine the appointments, but its decision, in the order of merit, is referred to the Governor. It is believed that but one Division-Surgeon will be appointed at present.

Communications Received.

California—Dr. A. H. Hoersbner, with encl. *Connecticut*—Dr. D. Rowe, Dr. P. W. Ellsworth. *Illinois*—Dr. N. E. Ballou. *Indiana*—Dr. J. A. Blackwell. *Iowa*—Dr. J. E. Ennis. *Massachusetts*—J. G. White, Dr. W. R. Chisholm, with encl.; Dr. C. S. Stickney, with encl.; Dr. C. C. Davis, with encl.; Dr. A. Sawyer, with encl.; Dr. P. S. Leaming, with encl.; Dr. H. E. Warren, with encl.; Dr. G. Atwood, with encl.; Dr. W. H. Gorden, with encl.; Dr. G. W. Stearnes, with encl.; Dr. L. Traver, with encl. *New Jersey*—Dr. T. Johnson, Dr. R. Woodhull. *New York*—Dr. N. R. Moseley, Dr. Louis Bauer, with encl. for Dr. J. Byrne; Dr. C. J. Nordquiet, with encl.; Dr. G. K. Smith. *Ohio*—Dr. O. E. Newton, with encl.; Dr. Thomas Johnson, with encl.; Dr. A. C. Barlow. *Pennsylvania*—Dr. M. J. M'Kinnon, Dr. G. R. M'Coy, with encl.; Drs. S. S. and R. S. Wallace, Dr. W. M. Herron. *Rhode Island*—Dr. J. W. Fearing, with encl.; Dr. J. W. Sarvin, with encl.; Dr. W. Handy, with encl.; Dr. J. D. Thompson, with encl.; Dr. Mumford with encl. *Vermont*—Dr. L. C. Butler. *Virginia*—Dr. R. D. Bontecou.

Office Payments.—Dr. A. F. Shelly, Dr. W. Bunn. By Mr. Swain: Drs. Hitchcock, T. J. Keeley, B. M'Lerney, H. B. M'Lean, Dr. H. S. Burpee, Williamson Burmeister, D. W. Kolbe, (adv.) and J. M. Migeod, (adv.)